Serious accidents and high potential incidents
Metalliferous mines and quarries

Compilation of reports for November 2016

Gravity

Fall of structure (1)
- A 5 m pole fell over while being lowered, striking a telecommunications worker on the hand. The worker sustained a fractured wrist.

Fall of equipment/material (3)
- A flotation cell stator foot weighing 1.4 kg rolled off a walkway and fell 8.5 m to the access way below.
- An air winch suspended from a lifting point by a D-shackle fell 6 m onto the platform below when the D-shackle failed.
- A forklift was picking up a four tonne lead ingot off the top of a stack of ingots when the remaining four ingots toppled over striking a concrete barrier.

Fall of ground (4)
- While loading and hauling out of a pit a rockfall on the pit wall resulted in material breaching the catch bund and landing on the pit ramp.
- While an Elphinstone R2900 loader was cleaning up the floor of a drive in preparation for construction of a bulk head, a 4 m x 3 m piece of shotcrete delaminated and fell off the wall striking the bucket of the loader.
- Approximately 150 kg of material fell from the back in a pump cuddy. The area was spot bolted but not meshed.
- While an exploration rig was reaming a paste fill hole on the surface a void, approximately 4 m in diameter and 5 m deep, opened up behind the drill rig. Two operators fell into the hole, with one receiving a lacerated hand.

Fall of people (3)
- An operator descending stairs on a Terex MT3300 truck lost balance and fell down the stairs to the ground. The operator appeared to be concussed and was transported to hospital for assessment.
- When hosing off a platform on the side of a thickener, a furnace operator climbed over a scaffold handrail, 5 m above the ground to access an overflow pipe one metre away.
- A worker fell 4 m through the mesh flooring of a walkway in a processing plant. The employee sustained serious injuries.

Fall of vehicle (1)
- While preparing to dump a load of material on a bench to level a drill pad, a Euclid rear dump truck reversed over the edge of the bench and fell 15 m. The operator sustained serious injuries.

Vehicle

Collision with a structure (1)
- A rear dump truck was travelling down an incline and lost traction, sliding into a table drain.

Collision with another vehicle (2)
- When operating on a crusher stockpile a Cat 998G loader reversed into a Cat 773B water cart. The loader operator was not aware the water cart had entered the work area.
- A Cat 980H loader and a Komatsu WA500 loader were feeding material into a pug mill bin. As one of the loaders reversed after tipping it contacted the other loader.
Rollover (4)
- While reversing a Cat 760 articulated water cart the trailer section tipped onto its side when the right hand rear wheels ran up onto a bund. The cabin remained upright.
- A small tray-back truck travelling on a mine road veered off the road, mounted a windrow and tipped onto its side.
- While a semi tipper was tipping a load the body of the trailer has tipped onto its left hand side.
- Two rear trailers of a Kenworth triple road train tipped onto their sides while travelling on a haul road.

Explosives
Flyrock (1)
- Flyrock from a blast in a pit landed on the ROM access ramp.

Pressure
Tyre rim failure / rupture (1)
- A maintenance crew were assembling four haul truck trailer tyres and inflating them remotely to 10–15 psi. While assembling the third tyre, the first tyre’s lock rim let go. The rim projected vertically about one metre and came to rest back on the tyre.

Mechanical
Entanglement in rotating plant (1)
- A worker had his arm pulled into a conveyor between a top centre idler and belt. The worker reached in between the top and bottom belt to tap a seized trough idler with a hammer. The worker sustained minor injuries.

Struck by a projectile (1)
- During a storm event, a gust of wind lifted a 30 m section of roofing off a bus shelter and carried it over an accommodation block. The roofing section came to rest 50 m from the bus shelter.

Thermal
Fire (4)
- A fire occurred in the engine bay of a 2900 loader when an oil hose burst spraying oil onto the turbo. The fire was extinguished by the on-board fire suppression system.
- While loading a feed hopper a hydraulic hose on the boom of a Hitachi 650 excavator burst, causing a small fire in the engine bay of the excavator. The operator shut the excavator down and extinguished the fire with a hand held extinguisher.
- While refuelling an AD45 truck, fuel discharged from a broken fuel tank breather, contacting the exhaust and caused a fire. The fire self-extinguished.
- A fire occurred under the retarder guard on a Normet Agitator truck. The operator extinguished the fire with a portable fire extinguisher and a water hose.

Crushed between a load and a structure (2)
- A bi-fold crusher pit door unexpectedly closed on the leg of a boilermaker while he was installing the door. He sustained a fractured right tibia and fibula.
- An operator had positioned a transfer conveyor and chained the conveyor jockey into position to transfer material into a bin. While the operator was attending to another task the anchor chain and counter weight failed on the jockey and the conveyor and jockey moved in an uncontrolled manner.

Explosion (1)
- During primary smelting operations an event in the furnace resulted in an ejection of concentrate dust and gas from the feed port of the furnace.
Electrical

Arc flash / blast (1)
- While digging a trench to install a fire ring main in a process plant, an excavator contacted a 415 volt steel wire armoured cable and peeled off the protective plastic coating.

Chart 1- November 2016 Events Reported (n=33)
Chart 2 - July to November 2016 by Hazard Category (n=135)

- Gravity - Fall of ground: 38%
- Gravity - Fall of vehicle: 14%
- Gravity - Fall of People: 10%
- Other: 2%
- Mechanical: 7%
- Pressure: 1%
- Thermal: 14%
- Explosives: 2%
- Electrical: 10%
- Chemical: 2%
- Psychosocial: 2%
- Other: 2%

Chart 3 - July to November 2016 Breakdown of Gravity (n=52)

- Gravity - Fall of ground: 38%
- Gravity - Fall of vehicle: 14%
- Gravity - Fall of People: 10%
- Gravity - Falling into a liquid (eg drowning): 2%
- Gravity - Fall of equipment/material: 34%
- Other: 2%
Vehicle collision with a structure 15%

Vehicle rollover 27%

Vehicle - Other 4%

Vehicle collision with another...